



# UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/509,460      | 09/28/2004  | Alain Coutarel       | P/3255-80           | 7424             |

2352 7590 03/25/2005

OSTROLENK FABER GERB & SOFFEN  
1180 AVENUE OF THE AMERICAS  
NEW YORK, NY 100368403

EXAMINER

HOOK, JAMES F

ART UNIT PAPER NUMBER

3754

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SN

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/509,460 | <b>Applicant(s)</b><br>COUTAREL ET AL. |  |
|                              | <b>Examiner</b><br>James F. Hook     | <b>Art Unit</b><br>3754                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 September 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13,14 and 19-24 is/are rejected.
- 7) ☒ Claim(s) 15-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9-28-04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13, 14, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugier (209). The patent to Sugier discloses the recited underwater flexible pipe comprising an external polymer sheath 7, a first upper retention layer 6, an upper radially outward tensile armor ply 5 wound in a long pitch helix as seen in the figures, the winding of the first retention layer is considered a method step in an article claim and to hold no patentable weight since it would not affect the final layer to be placed by any method including winding or otherwise, at least one second lower retention layer 20, at least one lower radially inward tensile armor ply 5 also (inside of 20), in a long pitch helix and similarly the method step of winding the second retention layer is a method step in an article claim and holds no patentable weight when there is no suggestion that winding the layer would provide any material change in the final product if another method were used, an internal sheath 2 formed of a polymer, and a metal

Art Unit: 3754

carcass 1 is the innermost layer inside of the internal sheath, where inherently the two retention layers have some stiffness such as K1 and K2.

Claims 13, 14, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kalman. The patent to Kalman discloses the recited underwater flexible pipe comprising an external polymer sheath 18, a first upper retention layer 16, an upper radially outward tensile armor ply 15 wound in a long pitch helix as seen in the figures, the winding of the first retention layer is considered a method step in an article claim and to hold no patentable weight since it would not affect the final layer to be placed by any method including winding or otherwise, at least one second lower retention layer 14, at least one lower radially inward tensile armor ply 13, in a long pitch helix and similarly the method step of winding the second retention layer is a method step in an article claim and holds no patentable weight when there is no suggestion that winding the layer would provide any material change in the final product if another method were used, an internal sheath 12 formed of a polymer, and a metal carcass 11 is the innermost layer inside of the internal sheath, where inherently the two retention layers have some stiffness such as K1 and K2.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalman in view of Sparks. The patent to Kalman discloses all of the recited structure with the exception of forming the retention layers of several unitary elements wound around the armor ply such as woven aramid fiber which inherently possesses high tensile strength and low compression strength, where the selection of a specific tensile strength is considered an obvious choice of mechanical expedients. The patent to Sparks discloses a plurality of layers including an internal polymer tube 1, and alternating layers of an armor ply formed of carbon (3 and 5), and retention layers 4,6 formed of an aramid woven material such as KEVLAR to form a pressure resistant hose. It would have been obvious to one skilled in the art to modify the retention layers in Kalman to be formed of any type of layer including a woven fabric layer of aramid fibers where such would provide greater strength to the tube as suggested by Sparks where such would lead to a superior final product that has more strength and could resist pressures more thereby saving money due to early failure of inferior materials, where the use of woven plastic fibers is known to be generally stronger than thin plastic sheets. The use of any specific tensile strength for the retention layer is considered merely a choice of mechanical expedients requiring only routine experimentation to arrive at optimum values.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalman in view of Seguin. The patent to Kalman discloses all of the recited structure with the exception of forming the polymer sheath as the innermost layer. The patent to Seguin discloses multiple embodiments, one of which utilizes a carcass 1 inside of a polymer

internal sheath 2, with various tensile layers 3,4,9,10, and polymer layers 6 and outer sheath 8, or in an alternate embodiment the internal polymer sheath 14 forms the innermost layer of the tube. It would have been obvious to one skilled in the art to modify the tube in Kalman by removing the inner carcass thereby using the internal sheath as the innermost layer as suggested by Seguin as such is an equivalent embodiment which would have more flexibility and be lighter thereby saving costs when the extra strength of the inner carcass is not required.

#### ***Allowable Subject Matter***

Claims 15-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

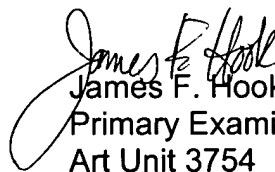
#### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Glejbol, Epinasse, Horvath, Wolfe, Sugier (984), Friedrich, Brindza, and Loper disclosing state of the art tubes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (571) 272-4906. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
James F. Hook  
Primary Examiner  
Art Unit 3754

JFH